I. TYPHOON PATSY (6-10 SEPTEMBER 1959)

Early on 6 September, quite unexpectedly, a series of pilot reports were received which confirmed the existence of a tropical cyclone, of at least tropical storm intensity, approximately 600 miles south-southwest of Midway Island. Based on these reports, which were from scheduled commercial and MATS flights between Honolulu and Wake Island, JTWC issued the first warning on Tropical Storm PATSY. Reconnaissance was requested, and a fix was made by a B-50 of the 54th Weather Reconnaissance Squadron at 061905Z. The maximum observed surface wind was 150 knots. PATSY was therefore upgraded to a typhoon in the next warning. Because of the sparsity of data in the area where PATSY was first discovered, surface and upper air charts, analyzed prior to receipt of the initial pilot reports pertaining to PATSY, failed to show any indication of a tropical cyclone in the formative stage of development.

PATSY at first moved to the northeast at 15 knots, steered by an upper level trough in the westerlies located to the west of the typhoon. However, 48 hours later, a second trough developed to the west of PATSY, and became the dominant trough. Under the influence of the latter trough, which had an unusual northwest-southeast orientation, PATSY curved to the northwest moving at 15 knots. As the trough-line neared the longitude of the typhoon, PATSY decelerated rapidly and began recurving to the northeast. Then, after making the turn, PATSY moved up the 180th meridian at 10 to 12 knots for the next 30 hours, slowly weakening. The final tropical warning was

issued at 101200Z.

PATSY was somewhat unique in that, by oscillating back and forth across the 180th meridian, she was quite properly called both a typhoon and hurricane. Perusal of climatological data covering the past 10 years failed to reveal a track similar to that of PATSY. A total of 17 warnings were issued covering a period of 5 days.

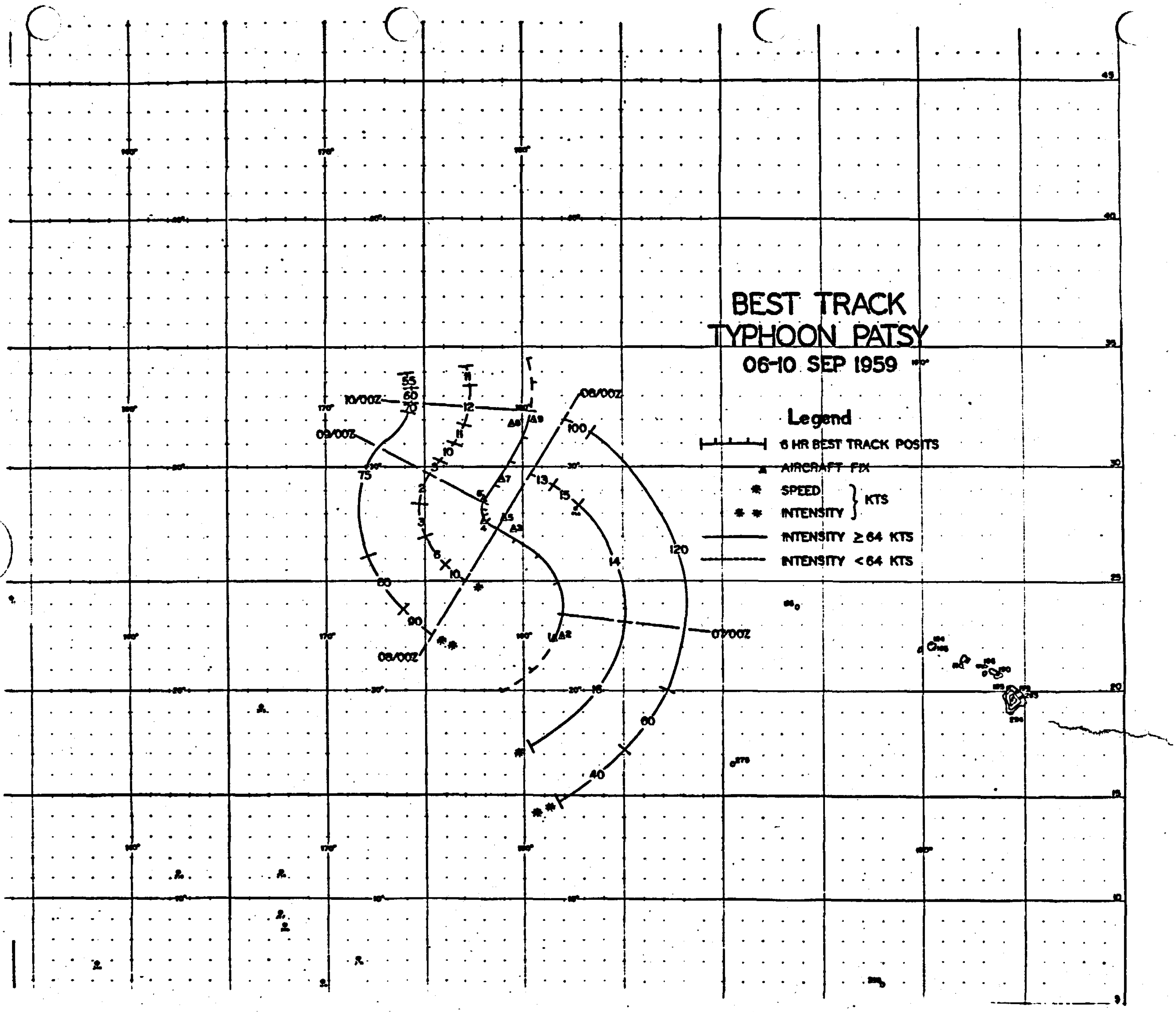
RECONNAISSANCE AIRCRAFT FIXES - TYPHOON PATSY

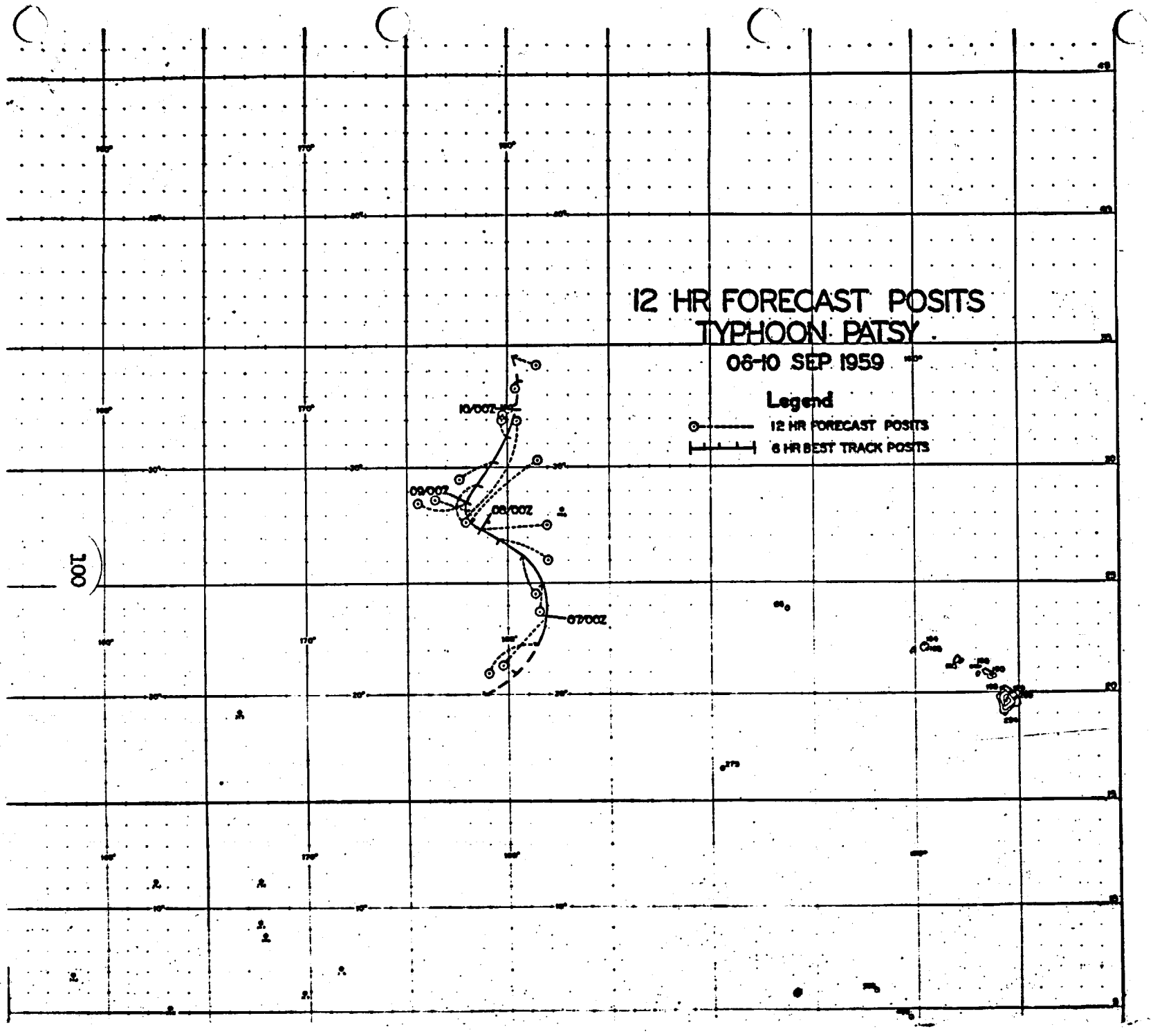
FIX NO.	TIME	LAT.	LONG.	*UNIT METHOD & ACCY	MIN SLP MBS	MAX SFC WND	MIN 700MB HGT	MAX FLT LVL WND	700MB TEMP (°C)	700MB DEWPT (°C)	EYE CHARACTERISTICS
1	061905Z	22.4N	178.4W	54-P-30	960	150	9280	85	21	14	CIRC DIA 10 MI
2	062205Z	22.5N	178.0W	54-P-25	- -	150	9360	50	22	15	CIRC DIA 10 MI
3	072000Z	27.2N	179.4E	54-P-5	972	100	9400	50	- -	- -	CIRC DIA 10 MI
4	080545Z	27.8N	178.0E	55-P-20	960	70	9310	85	- -	- -	CIRC DIA 10 MI
5	081900Z	27.9N	178.0E	55-P—	970	- -	9620	- -	- -	- -	CIRC DIA 10 MI
6	090314Z	28.5N	178.0E	AF-R—	- -	- -	- -	- -	- -	- -	———
7	090650Z	29.3N	179.0E	54-P-10	968	60	9250	60	16	10	CIRC DIA 40 MI
8	092058Z	31.9N	179.5E	VW-R—	- -	- -	- -	- -	- -	- -	———
9	092244Z	32.0N	179.2W	VW-R—	- -	- -	- -	- -	- -	- -	———

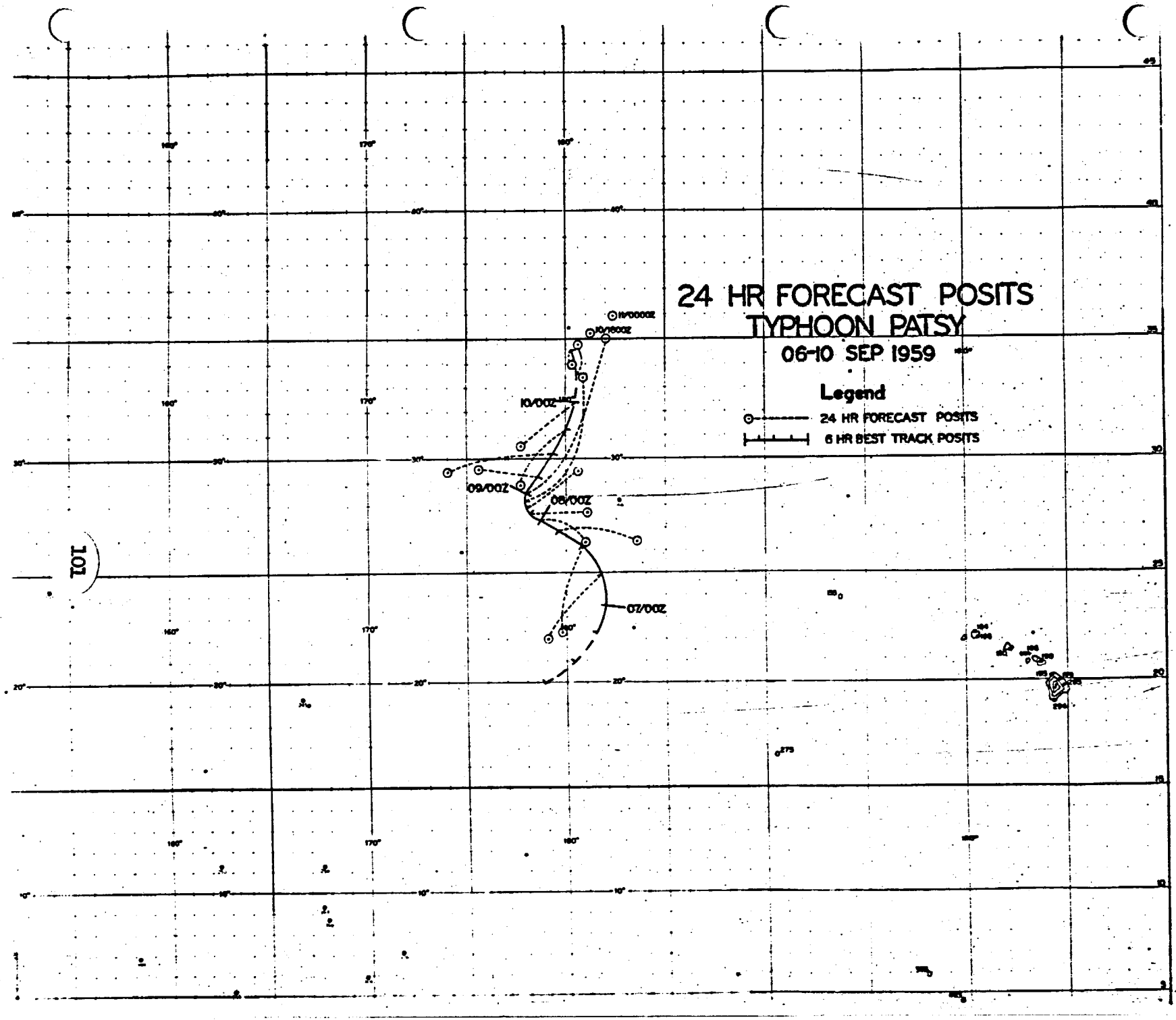
TYPHOON PATSY 06 - 10 AUGUST 1959
POSITION AND FORECAST VERIFICATION DATA

DTG	STORM POSITION LAT.	LONG.	12 HR ERROR DEG.	DISTANCE	24 HR ERROR DEG.	DISTANCE
060600Z	20.0N	179.0E	- - - -		- - - -	
061200Z	20.8N	179.5W	- - - -		- - - -	
061800Z	22.2N	178.5W	243	151	- - - -	
070000Z	23.5N	178.1W	219	179	- - - -	
070600Z	24.9N	178.2W	188	75	222	236
071200Z	26.2N	179.1W	160	114	194	248
071800Z	26.9N	179.7E	113	135	101	212
080000Z	27.3N	178.7E	087	176	119	141
080600Z	27.7N	178.2E	006	152	090	150
081200Z	27.9N	178.0E	019	260	056	164
081800Z	28.1N	177.9E	290	82	025	354
090000Z	28.4N	178.0E	273	134	028	446
090600Z	29.2N	178.7E	203	87	270	161
091200Z	30.2N	179.3E	243	99	254	276
091800Z	31.2N	180.0-	352	46	221	184
100000Z	32.4N	179.6W	252	29	230	185
100600Z	33.5N	179.6W	180	16	010	83
101200Z	34.5N	179.8E	106	80	138	38

AVERAGE 12 HOUR ERROR 113.4 NM
AVERAGE 24 HOUR ERROR 205.6 NM


BEST TRACK
TYPHOON PATSY
06-10 SEP 1959
Legend
6 HR BEST TRACK POSITS
AIRCRAFT FIX
SPEED
INTENSITY
KTS
INTENSITY ≥ 64 KTS
INTENSITY < 64 KTS
10/00Z
09/00Z
08/00Z
07/00Z
06/00Z


12 HR FORECAST POSITS
TYPHOON PATSY
06-10 SEP 1959
Legend
12 HR FORECAST POSITS
6 HR BEST TRACK POSITS
10/00Z
09/00Z
08/00Z
07/00Z
100


24 HR FORECAST POSITS
TYPHOON PATSY
06-10 SEP 1959
Legend
24 HR FORECAST POSITS
6 HR BEST TRACK POSITS
10/00Z
09/00Z
08/00Z
07/00Z
101